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## SEQUENCE LISTING

Caguiat, Jonathan

<120> Metal Binding Proteins, Recombinant Host Cells and Methods

<130> 79-00

<140> unassigned

<141> 2001-10-12

<150> US 60/240,465

<151> 2000-10-12

<160> 18

<170> PatentIn Ver. 2.0

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Ala Asp Val Val Arg Val Lys Phe Val Lys Ser Ala Gln Arg Leu Gly
50 55 60

Phe Ser Leu Asp Glu Ile Ala Glu Leu Leu Arg Leu Asp Asp Gly Thr 75 70 65 His Cys Glu Glu Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val 90 85 Arg Glu Lys Met Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys Pro Leu 120 115 Ile Ala Ser Leu Gln Gly Glu Ala Gly Leu Ala Arg Ser Ala Met Pro 140 135 130 <210> 3 <211> 321 <212> DNA <213> Artificial Sequence <220> <223> Description of Artificial Sequence: chelon atgacacact gegaggagge cageageetg geegaacaca ageteaagga egtgegegag 60 <400> 3 aagatggccg acttggcgcg catggaaacc gtgctgtctg aactcgtgtg cgcctgccat 120 gcacgaaagg ggaatgtttc ctgcccgttg atcgcgtcac tacagggatc ctcaggcacc 180 cactgcgagg aggccagcag cctggccgaa cacaagctca aggacgtgcg cgagaagatg 240 geogaettgg egegeatgga aacegtgetg tetgaacteg tgtgegeetg ceatgeacga 300 aaggggaatg tttcctgccc g <210> 4 <211> 117 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: chelon <400> 4 Met Thr His Cys Glu Glu Ala Ser Ser Leu Ala Glu His Lys Leu Lys 15 10 Asp Val Arg Glu Lys Met Ala Asp Leu Ala Arg Met Glu Thr Val Leu 20 Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys 35 Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu

55

Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Lys Met
65 70 75 80

Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala
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Cys His Ala Arg Lys Gly Asn Val Ser Cys Pro Ser Ala Trp Ser His 100 105 110

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Asp Val Arg Glu Lys Met Ala Asp Leu Ala Arg Met Glu Thr Val Leu 20 25 30

Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys 35 40 45

Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu
50 60

Val Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Lys Met

70

75

80

Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala 85 90 95

Cys His Ala Arg Lys Gly Asn Val Ser Cys Pro Ser Ala Trp Ser His
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Pro Gln Phe Glu Lys 115

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Leu Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser 40

Cys Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu

Glu Ala Ser Ser Leu Val Glu His Lys Leu Lys Asp Val Arg Glu Lys 70

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Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu 50

Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Thr Met 65

Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala 90 85

Cys His Ala Arg Lys Gly Asn Val Ser Cys Pro Ser Ala Trp Ser His 105 100 Pro Gln Phe Glu Lys 115 <210> 8 <211> 117 <212> PRT <213> Artificial Sequence <220> <223> Description of Artificial Sequence: chelon <400> 8 Met Thr His Cys Glu Glu Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Gln Met Ala Asp Leu Ala Arg Met Glu Thr Val Leu 20 Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Gln Met 70 Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala

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Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys 40 35

Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu

Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Lys Met

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Pro Gln Phe Glu Lys 115

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Ser Glu Leu Val Cys Ala Cys His Ala Arg Lys Gly Asn Val Ser Cys

Pro Leu Ile Ala Ser Leu Gln Gly Ser Ser Gly Thr His Cys Glu Glu

Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Lys Met 65

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Pro Gln Phe Glu Lys 115

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55

Ala Asp Leu Ala Arg Met Glu Thr Val Leu Ser Glu Leu Val Cys Ala 85 90 95  Cys His Ala Arg Lys Gly Asm Val Ser Cys Pro Ser Ala Trp Ser His 100 105 110  Pro Gln Phe Glu Lys 115  <210> 13 <211> 33 <211> DNA <213> Artificial Sequence  <220> <223> Description of Artificial Sequence: primer  <400> 13 tgcggcggtc tcaaatgaca cactgcgagg agg 33  <210> 14 <211> 33 <211> DNA <213> Artificial Sequence  <220> <223> Description of Artificial Sequence: primer  <400> 14 cgctgaggat ccctgtagtg acgcgatcaa cgg 33  <210> 15 <211> 30 <212> DNA <213> Artificial Sequence  <220> <221> DNA <213> Artificial Sequence  <220> <221> DNA <213> Description of Artificial Sequence: primer  <400> 15 cggagat ccctgtagtg acgcgatcaa cgg 33  <210> DNA <211> DNA <213> Artificial Sequence  <220> <221> DNA <213> Description of Artificial Sequence: primer  <400> 15 ctacagggat cctcaggcac ccactgcgag 30  <210> 16 <211> 33 <212> DNA <213> Artificial Sequence  <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220> <220	Ala Ser Ser Leu Ala Glu His Lys Leu Lys Asp Val Arg Glu Lys Met  70  75  80	
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